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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,575	02/08/2006	Ashleigh Glen Quick	p29195	2529
7055 7590 01/25/2011 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
EXAMINER DESIR, PIERRE LOUIS				
ART UNIT 2617		PAPER NUMBER		
NOTIFICATION DATE 01/25/2011		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

### Office Action Summary

**Application No.**

10/567,575

**Applicant(s)**

QUICK ET AL.

**Examiner**

PIERRE-LOUIS DESIR

**Art Unit**

2617

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 November 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-5,7,9-12,15-17 and 20-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,9-12,15-17 and 20-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Response to Arguments**

1. Applicant's arguments with respect to claims 1, 3-6, 7, 9-12, 15-17, 20-26 have been considered but are moot in view of the new ground(s) of rejection.

### **Claim Rejections - 35 USC § 102**

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1, 3-5, 7, 9, 10, 11, 12, 15, 16, 17, 20-26 are rejected under 35 U.S.C. 102(a) as being anticipated by White et al. (White) (US 20030227934 A1).

Regarding claims 1, 5, 11, 12 and 17, White discloses a system, transceiver/transmitter and communications method for use in a wireless network of devices, comprising transmitting, from a first device, data in a first time slot to each of at least two receiving devices in the wireless network; and transmitting, from each devices either a first acknowledgement state in a second time slot after the first time slot or transmitting a second acknowledgement state in a third time slot after the second time slot, wherein the first and second acknowledgement states are either a positive acknowledge and a negative acknowledge, respectively, or a negative acknowledge and a positive acknowledge, respectively, the second time slot is a slot for all devices in the wireless network for transmitting the first acknowledgement state, the third time slot is a

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slot for all devices in the wireless network for transmitting the second acknowledgement state (i.e., system and method of transmitting messages to multiple destination nodes is provided, in which a message from a source node is addressed to a multicast-broadcast address, and multiple destination node addresses are included in the message header.

Destination nodes which successfully receive the transmission calculate a timeslot in which to transmit an acknowledgement message based on the position of their address in the message header. The source node can then provide a retransmission to destination nodes which did not successfully receive the transmission as either a multicast-broadcast or a unicast communication depending on acknowledgement messages received (see abstract). All of the intended destinations are listed in the message header in a numerical order. Each intended destination node in turn calculates a time to send the acknowledgement message based upon the numerical order of the destination addresses listed in the message header. Thus, in a simple example, if node address 1, 2, and 3, are the ordered destination nodes listed in the message header and a direct correlation is used, then node 1 will transmit an ACK message in slot one, node 2 will transmit an ACK message in slot 2, and node 3 will transmit an ACK message in slot 3 (see paragraph 32).

It should also be noted that the messages are typically followed up with either an acknowledgement of successful reception (ACK) from the receiver, which informs the sending node that the message was received successfully, or a negative acknowledgement (NACK) where the message must be retransmitted. The NACK message, or lack of an ACK message, indicates that the message was not properly received, including situations where an ACK message was sent, but lost (see paragraph 30)), **and each device in the wireless network monitors time slots during which they are not transmitting to**

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**determine an overall acknowledgement state of the wireless network** (i.e., address and channel monitoring can be used, and an intelligent decision can be made based on how busy the network is at a specific time. A network that is not busy is much more likely to successfully receive broadcast messages. In contrast, where a network is very busy the number of nodes from which an ACK message is expected in response to a broadcast message should not be large. Many nodes will not send an ACK message in this situation because they are communicating with other nodes and do not receive the RTS for the broadcast message (see paragraph 35), wherein [any or each] sending node to monitor activity levels on at least one of an address and channel of said network for use in said communication of said data packet (see claim 19 of the reference)), and wherein the transceiver/receiver further receives the first acknowledgement state in the second time slot from at least one of the other transceiver/receivers in the communication system or receives the second acknowledgement state in the third time slot from at least one of the other transceiver/receivers (see abstract, paragraph 32)

Regarding claim 21, White discloses in a wireless network including a transceiver/transmitter and at least two transceiver/receivers, a method of disseminating data to be shared with the at least two transceiver/receivers, the method comprising transmitting from the transceiver/transmitter, the data to the at least two transceiver/receivers (see abstract); upon unsuccessfully receiving the data by at least one of the at least two transceiver/receivers, transmitting negative acknowledge data to indicate unsuccessful receipt of the data (see abstract and paragraph 30); retransmitting the data from the transceiver/transmitter (see abstract and paragraph 30); and replacing

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the data received by each of the at least two transceiver/receivers with the retransmitted data in each of the at least two transceiver/receivers (see paragraphs 36 and 39).

Regarding claim 4, White discloses a method (see claim 1 rejection), wherein the positive acknowledge comprises a transmission of a specific coded value containing sufficient redundancy to allow it to be recovered in the presence of received errors, and the negative acknowledge comprises a transmission of a specific coded value containing sufficient redundancy to allow it to be recovered in the presence of received errors (i.e., broadly written claims are being broadly interpreted by examiner. In this case, White discloses that the sending node receives both ACK and NACK from the receiving nodes. Therefore, inherently the ACK and NACK contains sufficient redundancy to allow for recovery, since the message itself (i.e., data packet) was transmitted with forward error correcting) (see abstract and claim 14 of the reference).

Regarding claims 9, 10, and 20, White discloses a communication system (see claim 5 rejection), wherein upon each of the transceiver/receivers detecting a correctly coded transmission in the negative acknowledge time slot, each of the transceiver/receivers discards the data previously received in the first time slot and wherein upon detecting a correctly coded transmission in the negative acknowledge time slot, the transceiver/transmitter retransmits the data to each of the transceiver/receivers (see abstract, paragraphs 30-35).

Regarding claims 15 and 16, White discloses a transceiver/receiver (see claim 11 rejection) wherein upon receiving a negative acknowledge from at least one of the other transceiver/receivers, the transceiver/receiver discards the data packet received in the first time slot, wherein the wherein the discarded data packet is replaced with data

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retransmitted by the transceiver/transmitter (see abstract, paragraph 30. Also refer to paragraphs 31-35).

Regarding claims 22-24, White discloses a method (see claim 21 rejection) wherein the negative acknowledge data is received by the transceiver/transmitter and least one transceiver/receiver other than a transceiver/receiver which transmitted the negative acknowledge data (see abstract, paragraphs 30-35), wherein upon receiving the negative acknowledge, transceiver/receivers that successfully received the data from the transceiver/transmitter discard the data received from the transceiver/transmitter before receiving the retransmitted data (see abstract, paragraphs 30-35), wherein the data is transmitted in a first time slot, the negative acknowledge is transmitted in a second time slot, and the data is retransmitted in a third time slot (see paragraphs 30-35).

Regarding claims 25-26, White discloses a method (see claim 23 rejection) wherein upon each successful receipt of data by one of the transceiver/receivers, the respective transceiver/receiver transmits a positive acknowledge (see abstract and paragraphs 30-35), wherein the positive acknowledge is transmitted in an additional time slot between the first time slot and the second time slot (see paragraphs 30-35).

Regarding claims 3 and 7, White discloses a method and system (see claim 1 and 5 rejections) wherein the first time slot is variable in length and the second and third time slots are fixed in length (i.e., as known in the art time slot is a fixed time slot. However, the assignment of the timeslots varied based on the ordered destination nodes listed on the message header) (see paragraphs 32, 38 and 42).

### **Conclusion**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PIERRE-LOUIS DESIR whose telephone number is (571)272-7799. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on (571)272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PIERRE-LOUIS DESIR/  
Primary Examiner, Art Unit 2617